

COVID-19 morbidity and mortality by race, ethnicity and spoken language in Washington state

Washington State Department of Health

April 19, 2022



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NOTE: Beginning the week of December 23, 2020, probable cases are included in the metrics calculated for morbidity and mortality associated with race, ethnicity, and spoken language. Probable cases are individuals with a positive antigen test for COVID-19. Also, as of December 16, 2020, probable cases are included in all case, hospitalization, and death counts on the Washington State Department of Health COVID-19 dashboard. Probable cases since June 2020, when the first antigen results were reported in Washington, are now included in the dashboard. This places the report on “COVID-19 Morbidity and Mortality by Race, Ethnicity and Spoken Language in Washington State” in alignment with the Washington State Department of Health COVID-19 Data Dashboard.

Overview

The impacts of COVID-19 morbidity and mortality have not been felt equally by all populations in Washington state. The pandemic has exacerbated the underlying and persistent inequities among historically marginalized communities and those disproportionately impacted due to structural racism and other forms of systemic oppression. This report provides an overview of confirmed or probable COVID-19 case, hospitalization, and death rates by race and ethnicity at state and regional levels. It also provides counts and percentages of confirmed or probable cases and hospitalizations by primary language spoken. Throughout this report, the COVID-19 case definition includes both molecular testing and antigen testing. Molecular positive cases are considered confirmed cases and antigen positive cases are considered probable cases. All hospitalization, death, and testing data reported here are based on positive molecular or antigen test results.

All rates presented in this report are adjusted for age using the Washington state population distribution based on the Office of Financial Management’s (OFM) April 1, 2020 population estimates by age, sex, race, and Hispanic origin. The rate calculations are for the population groups available from OFM for the Washington state population and follow Department of Health guidelines. Hispanic ethnicity was assigned first, regardless of race, and then racial groups were identified for those identifying as non-Hispanic. Based on this, the current report includes the following groups:

- Hispanic; and

- non-Hispanic race categorizations for white, Black, Native Hawaiian and Pacific Islander, Asian, and American Indian/Alaska Native.

While this allows assessment of data by race and ethnicity groups, this categorization is incomplete and does not reflect the diversity of people and experiences across the state. Additionally, there is a significant lack of race and ethnicity reporting for confirmed or probable COVID-19 cases and hospitalizations (about 28% missing) and for deaths (about 0% missing). Primary language spoken is missing for about 75% of cases and hospitalizations. Age information is missing for a small percentage of confirmed or probable cases (about 0.1%), and these cases are not included in age-adjusted rates. The lack of data limits our ability to draw firm conclusions; however, there are some concerning patterns reported below.

Cumulative age-adjusted confirmed or probable COVID-19 case, hospitalization, and death rates by race and ethnicity per 100,000 population

The table and figures below describe the counts and age-adjusted rates per 100,000 population in Washington by race and ethnicity for confirmed or probable cases, hospitalizations, and deaths for the entire time period from the start of the pandemic through 2022-04-18 based on the specimen collection date. 95% confidence intervals are included in the charts.

The data show that communities of color are disproportionately impacted by COVID-19 in significant ways, including the following.

COVID-19 confirmed or probable case rates

- Native Hawaiian and Pacific Islander (NHPI) and Hispanic populations have the highest age-adjusted confirmed or probable case rates while Asian and multiracial populations have the lowest case rates.
- Confirmed or probable case rates for NHPI and Hispanic populations are approximately three times higher than case rates for Asian and multiracial populations.
- Confirmed or probable case rates for Black populations are approximately two times higher than case rates among Asian and multiracial populations.

COVID-19 hospitalization rates among confirmed or probable cases

- Hospitalization rates among confirmed or probable COVID-19 cases are the highest for NHPI populations and lowest for multiracial populations.
- NHPI hospitalization rates among confirmed or probable COVID-19 cases are six times higher than white populations.
- Hispanic hospitalization rates among confirmed or probable COVID-19 cases are two times higher than white populations.
- Hospitalization rates among confirmed or probable COVID-19 cases for Black and American Indian and Alaska Native (AIAN) populations are two times higher compared to white populations.

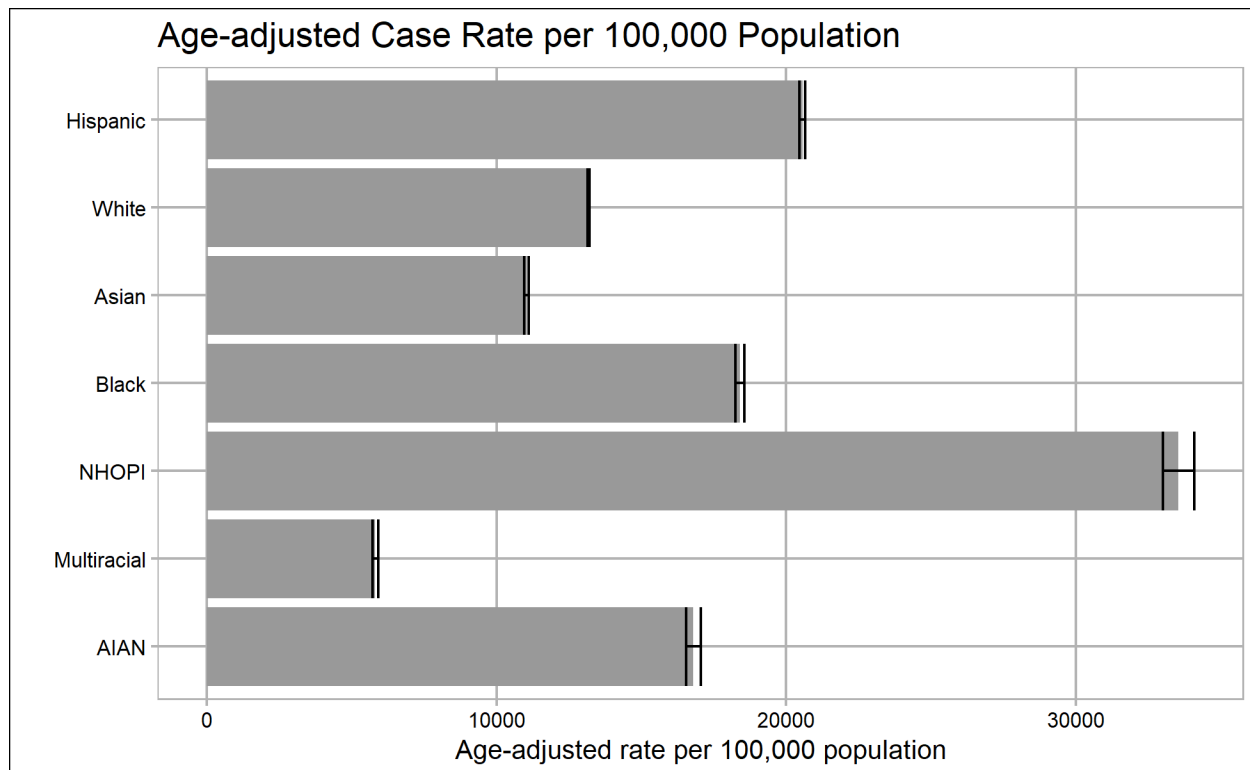
COVID-19 death rates among confirmed or probable cases

- Asian populations have the lowest death rates among confirmed or probable COVID-19 cases of all race/ethnicity groups.
- NHPI populations have death rates among confirmed or probable COVID-19 cases that are approximately five times higher than white and Asian populations.
- AIAN and Hispanic populations have death rates among confirmed or probable COVID-19 cases that are approximately three times higher than Asian populations.
- Black populations have death rates among confirmed or probable COVID-19 cases that are about twice as high as white populations.

Table 1. Confirmed or probable COVID-19 case, hospitalization, and death count and age-adjusted rates by race/ethnicity

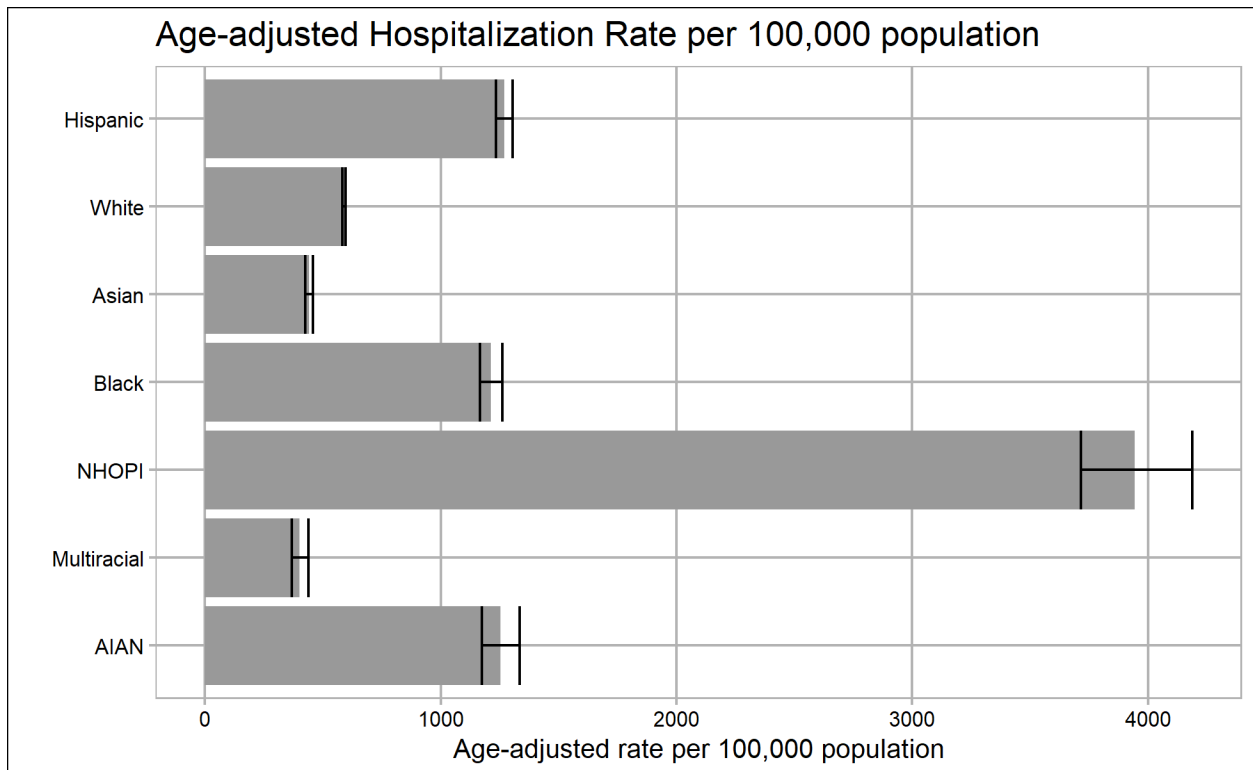
Race/Ethnicity	Case Count	Age-Adjusted Case Rate per 100,000	Hospitalization Count	Age-Adjusted Hospitalization Rate per 100,000	Death Count	Age-Adjusted Death Rate per 100,000
All Races	1,477,407	19296.9	59,783	780.8	12,645	165.2
Unknown	417,245		8,689		32	
Hispanic	207,384	20559.7	6,985	1269.1	1,231	356.9
White	650,097	13176.8	34,841	589.7	9,366	145.8
Asian	82,371	11033.3	2,636	441	703	140.1
Black	58,374	18399.4	2,908	1212	437	239.9
NHPI	19,037	33547.1	1,484	3944.2	214	798.6
Multiracial	17,804	5807.6	620	401.9	190	162.3
AIAN	16,179	16796.9	1,040	1252.8	278	398.6
Other	8,916		580		173	

The following graph indicates the age-adjusted confirmed or probable COVID-19 case rate per 100,000 population by race/ethnicity during the time period 2020-01-17 to 2022-04-18



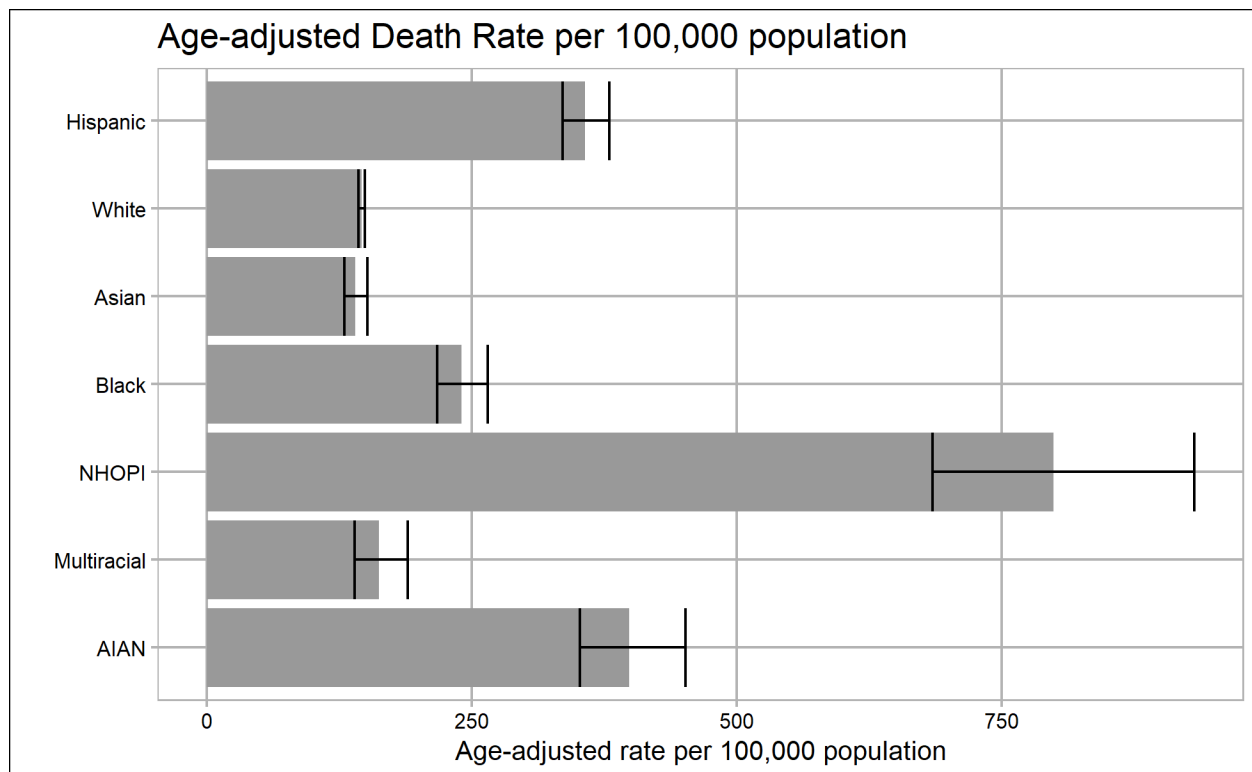
Source: Washington Disease Reporting System (WDRS)

The following graph indicates the age-adjusted hospitalization rate among confirmed or probable COVID-19 cases per 100,000 population by race/ethnicity during the time period 2020-01-17 to 2022-04-18



Source: Washington Disease Reporting System (WDRS)

The following graph indicates the age-adjusted death rate among confirmed or probable COVID-19 cases per 100,000 population by race/ethnicity during the time period 2020-01-17 to 2022-04-18



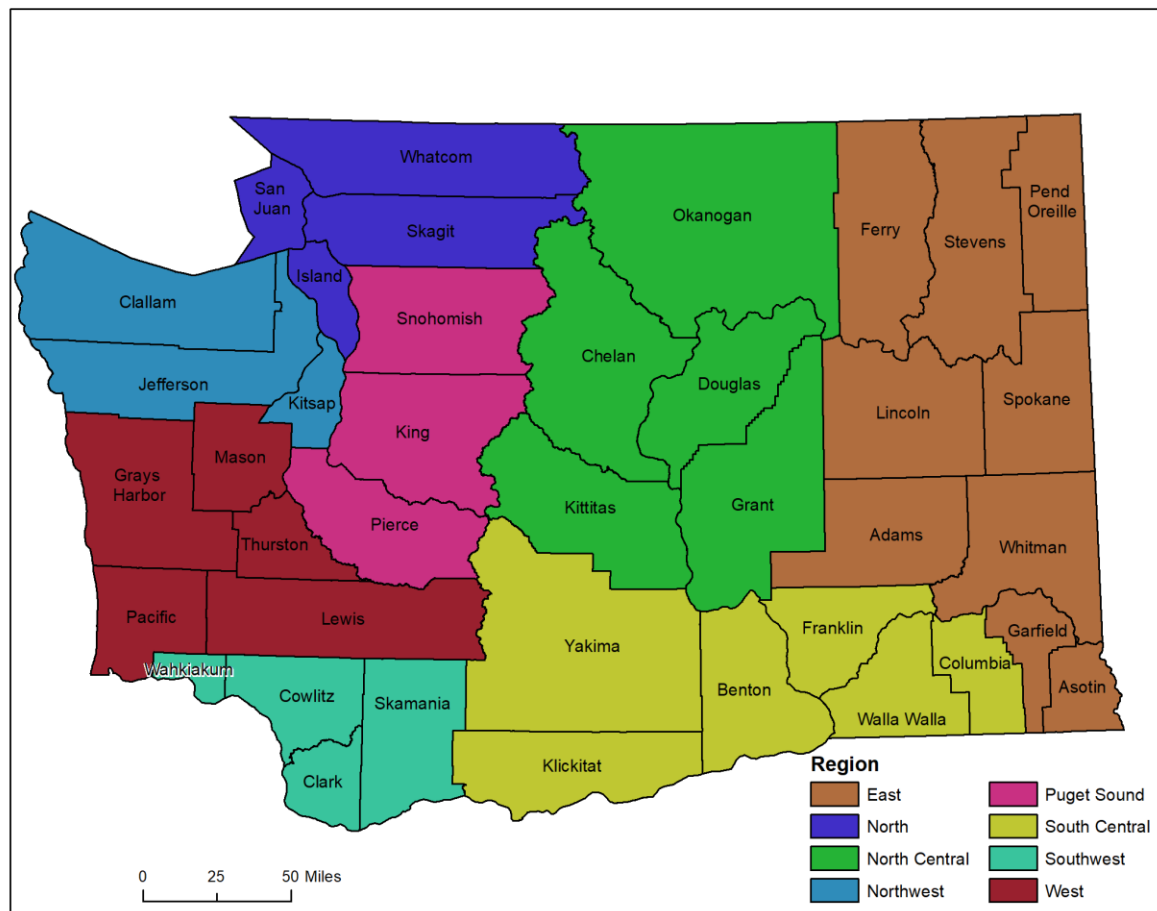
Source: Electronic Death Registration System (EDRS) and Washington Health and Life Events System (WHALES)

Analysis of confirmed or probable COVID-19 cases, hospitalizations, and deaths by geographic region

Regional groupings of Washington state counties

Some counties may not have sufficient case counts to analyze trends by race and ethnicity. In order to incorporate data from counties of all sizes, counties were assigned into one of 8 analytic regions (see Map of Washington Counties and Analysis Regions below). The regions presented were developed by the Washington State Department of Health in order to better understand geographic differences in disease spread and how disease spread may be changing over time. While infection rates may not be the same within any given region, this regional grouping allows for more specific geographic analyses without excluding any counties or communities due to concerns about smaller numbers.

Map of Washington counties by DOH analysis regions



Missing race/ethnicity data by region

The North and Northwest regions have the highest percentage of missing race/ethnicity data among confirmed or probable COVID-19 cases and the North Central, Puget Sound and West regions have the lowest percentage of missing data on race/ethnicity, as indicated in the following table. The total number of confirmed or probable cases, and the number and percentage of confirmed or probable cases with missing data are shown in Table 2.

Table 2. Counts and percentage of confirmed or probable COVID-19 cases with unknown race/ethnicity by DOH analytic region.

Region	Case Count	Cases with Unknown Race/Ethnicity	% Cases with Unknown Race/Ethnicity
East	157,134	42,765	27%
North	71,305	27,648	39%

Region	Case Count	Cases with Unknown Race/Ethnicity	% Cases with Unknown Race/Ethnicity
North Central	73,946	16,727	23%
Northwest	54,098	19,856	37%
Puget Sound	732,115	190,354	26%
South Central	175,925	51,738	29%
Southwest	113,854	41,393	36%
West	96,776	25,161	26%
Unknown	3,262	2,197	67%

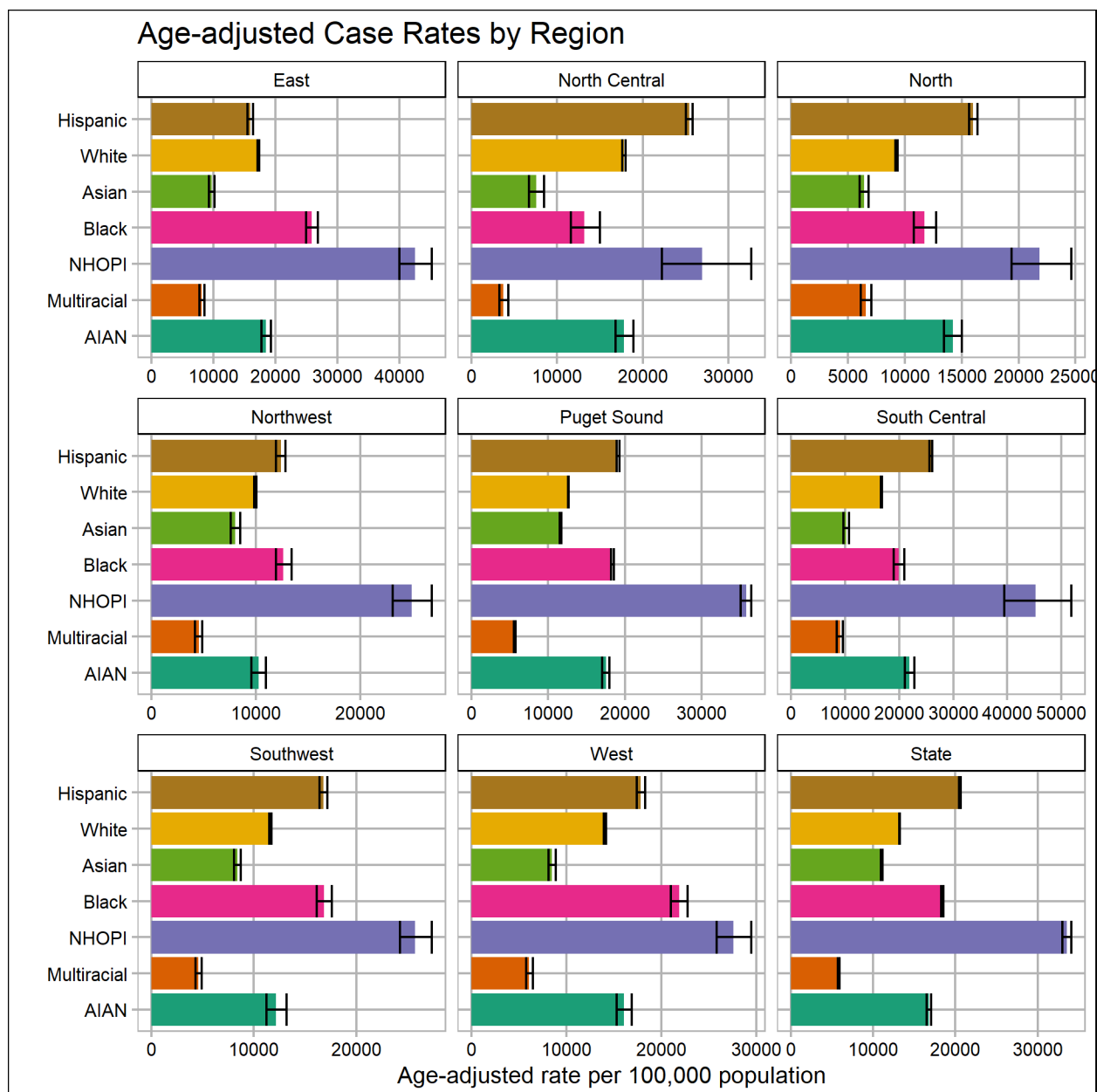
*Source: Washington Disease Reporting System (WDRS)
Includes data from 2020-01-17 to 2022-04-18*

Cumulative age-adjusted confirmed or probable COVID-19 case rates by race, ethnicity, and analytic region

The following figures describe the age-adjusted confirmed or probable COVID-19 case rates per 100,000 population by race/ethnicity and region. They were calculated using the confirmed or probable cases with known race/ethnicity (about 72% of all reported cases).

It is important to note that the numeric scale differs across regions, so use caution when comparing two or more regions, as their scales may differ. The last figure (lower right corner) presents the age-adjusted confirmed or probable COVID-19 case rates for the whole state.

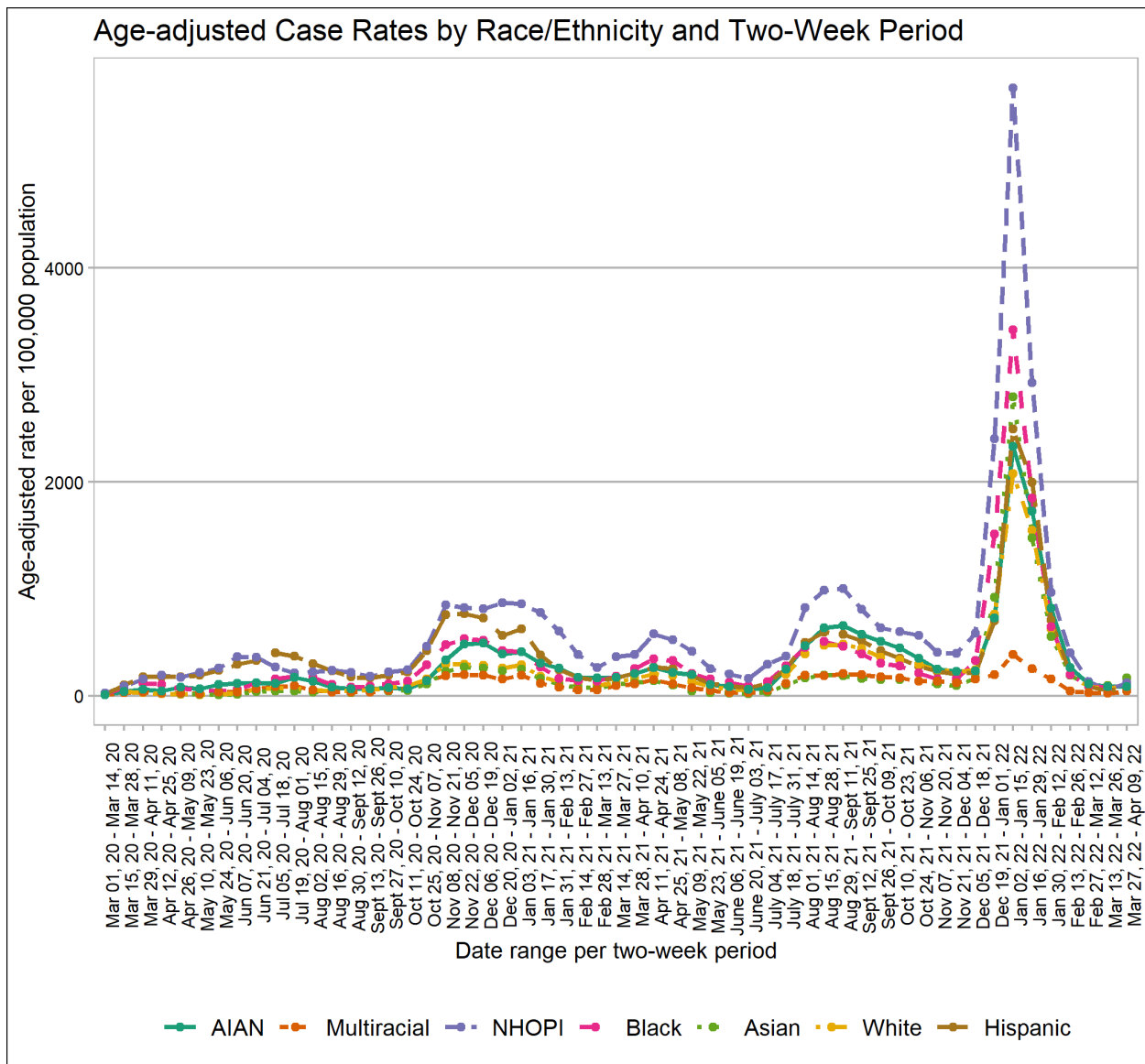
These data indicate that COVID-19 is found in significant numbers across racial and ethnic groups throughout the state, and it is not confined to certain areas, such as rural, urban, or suburban regions. Population centers in Puget Sound contribute substantially to the counts. However less populated regions, like South Central Washington, show larger rate differences by race/ethnicity, although they have smaller populations of racial and ethnic minorities. Further, while extreme disparities exist, people of all races and ethnicities are impacted.



Source: Washington Disease Reporting System (WDRS)
Includes data from 2020-01-17 to 2022-04-18

Age-adjusted confirmed or probable COVID-19 case rates by race and ethnicity per two-week period (Mar 2020-April* 2022)

*February 2022 data include all confirmed or probable cases with a specimen collection date through 2022-04-09 to include the most recent, complete two-week period of data collection.



Confirmed or probable COVID-19 case rates, adjusted for age by race and ethnicity, were calculated to better understand how race- and ethnicity-specific patterns may be changing over time by two-week period. Race/ethnicity-specific counts and age-adjusted rates increased for all race/ethnicity groups through July and early August 2020. All groups declined from early August to mid/late-August and flattened through September 2020. All race/ethnicity-age-adjusted rates began to rapidly increase in mid-October through the end of November. Rates of confirmed or probable cases remain highest for Hispanic and NHPI population, and higher Black and AIAN populations in comparison to white, Asian, and multiracial populations.

Table 3. Age-adjusted confirmed or probable COVID-19 case rates by race and ethnicity per two-week period (Mar 1, 2020 - Apr 09, 2022)

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
Hispanic	Mar 01, 20-Mar 14, 20	107	15.1	12.1	18.8
	Mar 15, 20-Mar 28, 20	704	103.3	94.7	112.7
	Mar 29, 20-Apr 11, 20	1,215	175.7	164.3	187.9
	Apr 12, 20-Apr 25, 20	1,372	176.8	166.0	188.3
	Apr 26, 20-May 09, 20	1,474	177.6	167.1	188.7
	May 10, 20-May 23, 20	1,711	195.6	184.9	206.8
	May 24, 20-Jun 06, 20	2,003	237.1	224.9	250.0
	Jun 07, 20-Jun 20, 20	2,498	293.5	279.9	307.7
	Jun 21, 20-Jul 04, 20	2,926	329.3	315.0	344.1
	Jul 05, 20-Jul 18, 20	3,785	403.1	388.1	418.7
	Jul 19, 20-Aug 01, 20	3,474	373.4	358.8	388.6
	Aug 02, 20-Aug 15, 20	2,737	298.9	285.7	312.7
	Aug 16, 20-Aug 29, 20	2,158	233.3	221.7	245.4
	Aug 30, 20-Sept 12, 20	1,643	176.7	166.7	187.3
	Sept 13, 20-Sept 26, 20	1,518	166.4	156.6	176.9

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Sept 27, 20-Oct 10, 20	1,816	191.3	181.1	202.1
	Oct 11, 20-Oct 24, 20	2,152	225.8	214.8	237.4
	Oct 25, 20-Nov 07, 20	4,101	423.8	408.6	439.6
	Nov 08, 20-Nov 21, 20	7,124	756.3	735.8	777.5
	Nov 22, 20-Dec 05, 20	7,311	766.9	746.2	788.1
	Dec 06, 20-Dec 19, 20	6,870	728.9	708.7	749.8
	Dec 20, 20-Jan 02, 21	5,294	567.3	549.3	585.9
	Jan 03, 21-Jan 16, 21	6,040	625.3	606.7	644.5
	Jan 17, 21-Jan 30, 21	3,523	380.7	365.7	396.3
	Jan 31, 21-Feb 13, 21	2,326	242.2	230.7	254.3
	Feb 14, 21-Feb 27, 21	1,685	172.5	162.9	182.6
	Feb 28, 21-Mar 13, 21	1,441	142.6	134.2	151.6
	Mar 14, 21-Mar 27, 21	1,768	169.0	160.0	178.5
	Mar 28, 21-Apr 10, 21	2,289	213.9	203.9	224.3
	Apr 11, 21-Apr 24, 21	2,872	267.4	256.3	279.0
	Apr 25, 21-May 08, 21	2,775	256.1	245.2	267.5

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	May 09, 21-May 22, 21	2,011	182.0	173.0	191.5
	May 23, 21-June 05, 21	1,277	118.8	111.4	126.8
	June 06, 21-June 19, 21	940	92.6	85.8	100.0
	June 20, 21-July 03, 21	752	74.2	68.1	81.0
	July 04, 21-July 17, 21	1,174	120.9	112.7	129.7
	July 18, 21-July 31, 21	2,674	255.1	244.0	266.7
	Aug 01, 21-Aug 14, 21	5,260	499.0	483.4	515.2
	Aug 15, 21-Aug 28, 21	6,131	595.6	578.1	613.6
	Aug 29, 21-Sept 11, 21	6,021	575.5	558.3	593.3
	Sept 12, 21-Sept 25, 21	5,499	512.6	496.6	529.1
	Sept 26, 21-Oct 09, 21	4,459	422.2	407.5	437.5
	Oct 10, 21-Oct 23, 21	3,604	349.2	335.7	363.2
	Oct 24, 21-Nov 06, 21	2,941	276.6	264.8	288.9
	Nov 07, 21-Nov 20, 21	2,402	229.4	218.6	240.8
	Nov 21, 21-Dec 04, 21	2,169	204.1	194.0	214.8
	Dec 05, 21-Dec 18, 21	2,415	220.2	210.0	231.0

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
White	Dec 19, 21-Jan 01, 22	7,414	704.8	686.3	723.8
	Jan 02, 22-Jan 15, 22	27,754	2,496.5	2,462.4	2,531.1
	Jan 16, 22-Jan 29, 22	21,984	1,996.0	1,964.8	2,027.7
	Jan 30, 22-Feb 12, 22	7,523	706.5	687.2	726.3
	Feb 13, 22-Feb 26, 22	1,952	196.7	186.1	207.9
	Feb 27, 22-Mar 12, 22	791	85.7	78.4	93.7
	Mar 13, 22-Mar 26, 22	465	49.8	44.4	55.8
	Mar 27, 22-Apr 09, 22	664	70.6	64.3	77.4
	Mar 01, 20-Mar 14, 20	642	11.0	10.1	11.9
	Mar 15, 20-Mar 28, 20	2,392	42.4	40.7	44.1
	Mar 29, 20-Apr 11, 20	1,806	32.1	30.6	33.6
	Apr 12, 20-Apr 25, 20	1,044	18.3	17.2	19.5
	Apr 26, 20-May 09, 20	883	15.6	14.6	16.7
	May 10, 20-May 23, 20	602	10.9	10.0	11.8
	May 24, 20-Jun 06, 20	774	14.7	13.7	15.8
	Jun 07, 20-Jun 20, 20	1,343	25.9	24.5	27.3

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Jun 21, 20-Jul 04, 20	2,921	59.2	57.0	61.4
	Jul 05, 20-Jul 18, 20	3,518	69.8	67.5	72.2
	Jul 19, 20-Aug 01, 20	3,518	68.6	66.3	70.9
	Aug 02, 20-Aug 15, 20	2,800	55.0	53.0	57.1
	Aug 16, 20-Aug 29, 20	2,220	44.1	42.3	46.0
	Aug 30, 20-Sept 12, 20	2,237	44.5	42.7	46.4
	Sept 13, 20-Sept 26, 20	2,794	54.9	52.9	57.0
	Sept 27, 20-Oct 10, 20	3,922	77.8	75.3	80.3
	Oct 11, 20-Oct 24, 20	4,900	96.1	93.4	98.9
	Oct 25, 20-Nov 07, 20	8,064	158.9	155.5	162.5
	Nov 08, 20-Nov 21, 20	14,889	293.7	289.0	298.6
	Nov 22, 20-Dec 05, 20	15,155	296.8	292.1	301.6
	Dec 06, 20-Dec 19, 20	14,559	284.1	279.5	288.8
	Dec 20, 20-Jan 02, 21	13,281	259.5	255.1	264.1
	Jan 03, 21-Jan 16, 21	14,568	288.3	283.6	293.1
	Jan 17, 21-Jan 30, 21	9,193	182.0	178.3	185.8

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Jan 31, 21-Feb 13, 21	6,762	134.3	131.1	137.6
	Feb 14, 21-Feb 27, 21	5,203	104.1	101.3	107.0
	Feb 28, 21-Mar 13, 21	4,824	97.5	94.7	100.3
	Mar 14, 21-Mar 27, 21	6,347	129.3	126.2	132.6
	Mar 28, 21-Apr 10, 21	8,035	164.9	161.3	168.5
	Apr 11, 21-Apr 24, 21	9,963	204.4	200.4	208.5
	Apr 25, 21-May 08, 21	9,032	186.1	182.3	190.0
	May 09, 21-May 22, 21	6,508	133.2	130.0	136.5
	May 23, 21-June 05, 21	4,461	91.2	88.5	93.9
	June 06, 21-June 19, 21	3,096	62.3	60.1	64.5
	June 20, 21-July 03, 21	2,721	54.5	52.4	56.6
	July 04, 21-July 17, 21	4,447	90.2	87.6	92.9
	July 18, 21-July 31, 21	10,010	202.0	198.0	206.0
	Aug 01, 21-Aug 14, 21	19,260	389.7	384.2	395.3
	Aug 15, 21-Aug 28, 21	23,612	474.2	468.2	480.4
	Aug 29, 21-Sept 11, 21	23,932	482.8	476.7	489.1

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Sept 12, 21-Sept 25, 21	21,635	441.5	435.6	447.5
	Sept 26, 21-Oct 09, 21	17,837	363.7	358.3	369.1
	Oct 10, 21-Oct 23, 21	16,597	334.7	329.5	339.9
	Oct 24, 21-Nov 06, 21	14,748	297.3	292.5	302.2
	Nov 07, 21-Nov 20, 21	12,093	246.2	241.8	250.7
	Nov 21, 21-Dec 04, 21	10,875	221.7	217.6	226.0
	Dec 05, 21-Dec 18, 21	11,839	245.1	240.7	249.6
	Dec 19, 21-Jan 01, 22	37,228	765.6	757.7	773.4
	Jan 02, 22-Jan 15, 22	100,106	2,078.2	2,065.3	2,091.3
	Jan 16, 22-Jan 29, 22	74,661	1,545.4	1,534.2	1,556.7
	Jan 30, 22-Feb 12, 22	30,630	624.5	617.4	631.6
	Feb 13, 22-Feb 26, 22	9,634	191.9	188.1	195.8
	Feb 27, 22-Mar 12, 22	4,283	84.2	81.6	86.8
	Mar 13, 22-Mar 26, 22	3,375	66.7	64.5	69.1
	Mar 27, 22-Apr 09, 22	4,900	97.5	94.8	100.4
Asian	Mar 01, 20-Mar 14, 20	122	18.9	15.7	22.8

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Mar 15, 20-Mar 28, 20	306	43.9	39.1	49.3
	Mar 29, 20-Apr 11, 20	376	54.5	49.1	60.4
	Apr 12, 20-Apr 25, 20	269	39.5	34.9	44.7
	Apr 26, 20-May 09, 20	154	21.9	18.6	25.8
	May 10, 20-May 23, 20	122	17.4	14.4	20.9
	May 24, 20-Jun 06, 20	85	11.7	9.4	14.5
	Jun 07, 20-Jun 20, 20	116	16.1	13.4	19.5
	Jun 21, 20-Jul 04, 20	294	39.8	35.4	44.7
	Jul 05, 20-Jul 18, 20	327	44.3	39.6	49.5
	Jul 19, 20-Aug 01, 20	326	45.2	40.4	50.5
	Aug 02, 20-Aug 15, 20	279	37.8	33.6	42.7
	Aug 16, 20-Aug 29, 20	264	35.6	31.5	40.3
	Aug 30, 20-Sept 12, 20	214	29.5	25.7	33.9
	Sept 13, 20-Sept 26, 20	253	35.0	30.8	39.7
	Sept 27, 20-Oct 10, 20	354	46.8	42.1	52.0
	Oct 11, 20-Oct 24, 20	380	49.9	45.1	55.3

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Oct 25, 20-Nov 07, 20	815	109.7	102.3	117.7
	Nov 08, 20-Nov 21, 20	1,717	230.4	219.5	241.8
	Nov 22, 20-Dec 05, 20	1,985	271.7	259.7	284.2
	Dec 06, 20-Dec 19, 20	1,867	260.9	249.1	273.4
	Dec 20, 20-Jan 02, 21	1,691	231.8	220.7	243.4
	Jan 03, 21-Jan 16, 21	1,808	250.3	238.8	262.4
	Jan 17, 21-Jan 30, 21	1,161	162.3	153.0	172.2
	Jan 31, 21-Feb 13, 21	757	105.0	97.6	112.9
	Feb 14, 21-Feb 27, 21	604	82.8	76.3	89.8
	Feb 28, 21-Mar 13, 21	534	71.0	65.2	77.5
	Mar 14, 21-Mar 27, 21	794	106.3	99.0	114.1
	Mar 28, 21-Apr 10, 21	940	121.9	114.2	130.1
	Apr 11, 21-Apr 24, 21	1,090	142.2	133.8	151.0
	Apr 25, 21-May 08, 21	788	101.9	94.9	109.4
	May 09, 21-May 22, 21	362	47.3	42.6	52.6
	May 23, 21-June 05, 21	231	31.2	27.4	35.7

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	June 06, 21-June 19, 21	170	23.3	20.0	27.1
	June 20, 21-July 03, 21	147	19.1	16.2	22.5
	July 04, 21-July 17, 21	277	36.0	31.9	40.6
	July 18, 21-July 31, 21	759	100.3	93.2	107.8
	Aug 01, 21-Aug 14, 21	1,279	168.1	159.0	177.8
	Aug 15, 21-Aug 28, 21	1,435	191.9	182.0	202.3
	Aug 29, 21-Sept 11, 21	1,400	186.3	176.6	196.6
	Sept 12, 21-Sept 25, 21	1,201	161.3	152.3	170.9
	Sept 26, 21-Oct 09, 21	1,119	152.1	143.3	161.5
	Oct 10, 21-Oct 23, 21	1,120	153.0	144.1	162.4
	Oct 24, 21-Nov 06, 21	1,006	136.7	128.4	145.6
	Nov 07, 21-Nov 20, 21	814	111.2	103.7	119.3
	Nov 21, 21-Dec 04, 21	711	95.8	88.8	103.2
	Dec 05, 21-Dec 18, 21	1,278	169.4	160.2	179.1
	Dec 19, 21-Jan 01, 22	7,107	921.1	899.6	943.2
	Jan 02, 22-Jan 15, 22	21,093	2,797.4	2,759.2	2,836.1

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
Black	Jan 16, 22-Jan 29, 22	10,934	1,474.1	1,446.2	1,502.5
	Jan 30, 22-Feb 12, 22	4,082	552.5	535.5	570.1
	Feb 13, 22-Feb 26, 22	1,455	195.6	185.6	206.1
	Feb 27, 22-Mar 12, 22	647	87.6	80.9	94.8
	Mar 13, 22-Mar 26, 22	719	96.4	89.5	103.9
	Mar 27, 22-Apr 09, 22	1,311	168.7	159.7	178.3
	Mar 01, 20-Mar 14, 20	36	13.6	9.6	19.3
	Mar 15, 20-Mar 28, 20	213	76.8	66.6	88.5
	Mar 29, 20-Apr 11, 20	319	116.3	103.5	130.6
	Apr 12, 20-Apr 25, 20	311	106.2	94.6	119.2
	Apr 26, 20-May 09, 20	213	71.6	62.2	82.3
	May 10, 20-May 23, 20	160	51.6	43.9	60.6
	May 24, 20-Jun 06, 20	133	45.2	37.7	54.1
	Jun 07, 20-Jun 20, 20	195	62.2	53.8	72.1
	Jun 21, 20-Jul 04, 20	387	121.4	109.4	134.7
	Jul 05, 20-Jul 18, 20	512	159.4	145.8	174.2

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Jul 19, 20-Aug 01, 20	566	183.1	168.1	199.5
	Aug 02, 20-Aug 15, 20	522	172.3	157.5	188.4
	Aug 16, 20-Aug 29, 20	324	104.6	93.4	117.1
	Aug 30, 20-Sept 12, 20	246	80.1	70.3	91.3
	Sept 13, 20-Sept 26, 20	277	89.8	79.3	101.6
	Sept 27, 20-Oct 10, 20	365	113.7	102.3	126.4
	Oct 11, 20-Oct 24, 20	425	135.4	122.6	149.4
	Oct 25, 20-Nov 07, 20	941	289.9	271.5	309.4
	Nov 08, 20-Nov 21, 20	1,511	479.4	455.1	505.1
	Nov 22, 20-Dec 05, 20	1,631	532.1	505.8	559.8
	Dec 06, 20-Dec 19, 20	1,553	517.1	490.8	544.7
	Dec 20, 20-Jan 02, 21	1,275	419.9	396.5	444.7
	Jan 03, 21-Jan 16, 21	1,277	410.0	387.2	434.0
	Jan 17, 21-Jan 30, 21	822	268.3	249.8	288.1
	Jan 31, 21-Feb 13, 21	491	160.9	146.6	176.5
	Feb 14, 21-Feb 27, 21	434	141.7	128.4	156.3

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Feb 28, 21-Mar 13, 21	433	136.6	124.0	150.4
	Mar 14, 21-Mar 27, 21	590	185.0	170.2	201.0
	Mar 28, 21-Apr 10, 21	843	255.1	238.1	273.2
	Apr 11, 21-Apr 24, 21	1,132	344.9	325.0	366.1
	Apr 25, 21-May 08, 21	1,071	330.1	310.4	351.1
	May 09, 21-May 22, 21	670	206.1	190.8	222.7
	May 23, 21-June 05, 21	506	155.5	142.2	170.1
	June 06, 21-June 19, 21	401	125.5	113.4	138.9
	June 20, 21-July 03, 21	304	93.8	83.6	105.3
	July 04, 21-July 17, 21	448	133.2	121.3	146.4
	July 18, 21-July 31, 21	921	278.9	261.0	297.9
	Aug 01, 21-Aug 14, 21	1,463	450.4	427.3	474.6
	Aug 15, 21-Aug 28, 21	1,617	507.3	482.5	533.4
	Aug 29, 21-Sept 11, 21	1,462	464.9	440.8	490.2
	Sept 12, 21-Sept 25, 21	1,250	390.2	368.6	413.1
	Sept 26, 21-Oct 09, 21	985	305.2	286.2	325.5

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
NHPI	Oct 10, 21-Oct 23, 21	889	281.2	262.8	301.0
	Oct 24, 21-Nov 06, 21	673	212.0	196.1	229.2
	Nov 07, 21-Nov 20, 21	493	156.6	142.9	171.7
	Nov 21, 21-Dec 04, 21	515	157.5	144.2	172.0
	Dec 05, 21-Dec 18, 21	1,083	330.5	311.0	351.2
	Dec 19, 21-Jan 01, 22	4,927	1,510.9	1,468.3	1,554.7
	Jan 02, 22-Jan 15, 22	10,998	3,421.4	3,356.3	3,487.8
	Jan 16, 22-Jan 29, 22	5,869	1,846.5	1,798.4	1,895.9
	Jan 30, 22-Feb 12, 22	2,009	646.2	617.5	676.3
	Feb 13, 22-Feb 26, 22	601	199.1	183.0	216.6
	Feb 27, 22-Mar 12, 22	269	89.9	79.3	101.8
	Mar 13, 22-Mar 26, 22	244	79.9	70.0	91.2
	Mar 27, 22-Apr 09, 22	352	114.4	102.5	127.6
	Mar 01, 20-Mar 14, 20	11	24.9	12.8	48.6
	Mar 15, 20-Mar 28, 20	35	89.0	59.3	133.7
	Mar 29, 20-Apr 11, 20	68	158.8	119.7	210.8

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Apr 12, 20-Apr 25, 20	102	192.4	155.9	237.3
	Apr 26, 20-May 09, 20	89	171.6	136.8	215.3
	May 10, 20-May 23, 20	119	216.2	177.6	263.1
	May 24, 20-Jun 06, 20	147	261.2	217.2	314.1
	Jun 07, 20-Jun 20, 20	208	366.6	316.4	424.7
	Jun 21, 20-Jul 04, 20	200	363.3	311.1	424.2
	Jul 05, 20-Jul 18, 20	155	270.5	228.2	320.6
	Jul 19, 20-Aug 01, 20	116	212.1	172.5	260.9
	Aug 02, 20-Aug 15, 20	114	222.2	179.9	274.5
	Aug 16, 20-Aug 29, 20	127	238.1	195.5	290.0
	Aug 30, 20-Sept 12, 20	117	218.3	177.1	269.0
	Sept 13, 20-Sept 26, 20	98	182.8	145.9	229.1
	Sept 27, 20-Oct 10, 20	115	225.9	181.8	280.7
	Oct 11, 20-Oct 24, 20	124	242.5	196.2	299.7
	Oct 25, 20-Nov 07, 20	253	461.4	402.3	529.1
	Nov 08, 20-Nov 21, 20	473	850.9	769.9	940.5

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Nov 22, 20-Dec 05, 20	440	822.6	736.9	918.2
	Dec 06, 20-Dec 19, 20	445	815.0	732.3	907.0
	Dec 20, 20-Jan 02, 21	460	870.7	783.9	967.2
	Jan 03, 21-Jan 16, 21	492	859.0	778.5	947.9
	Jan 17, 21-Jan 30, 21	421	778.2	697.2	868.6
	Jan 31, 21-Feb 13, 21	325	606.0	535.9	685.2
	Feb 14, 21-Feb 27, 21	225	385.1	334.4	443.6
	Feb 28, 21-Mar 13, 21	149	266.8	223.5	318.4
	Mar 14, 21-Mar 27, 21	214	365.6	316.6	422.2
	Mar 28, 21-Apr 10, 21	219	385.8	333.2	446.9
	Apr 11, 21-Apr 24, 21	343	581.5	517.9	652.8
	Apr 25, 21-May 08, 21	326	523.2	465.1	588.7
	May 09, 21-May 22, 21	241	419.7	363.4	484.8
	May 23, 21-June 05, 21	153	255.7	214.2	305.3
	June 06, 21-June 19, 21	126	202.0	167.8	243.2
	June 20, 21-July 03, 21	94	163.8	131.1	204.7

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	July 04, 21- July 17, 21	176	295.1	250.5	347.7
	July 18, 21- July 31, 21	225	369.4	319.6	427.0
	Aug 01, 21- Aug 14, 21	488	824.2	745.3	911.6
	Aug 15, 21- Aug 28, 21	561	986.9	898.5	1,084.0
	Aug 29, 21- Sept 11, 21	590	1,001.4	915.3	1,095.6
	Sept 12, 21- Sept 25, 21	456	811.6	731.6	900.2
	Sept 26, 21- Oct 09, 21	359	636.0	566.3	714.4
	Oct 10, 21- Oct 23, 21	357	600.8	535.0	674.7
	Oct 24, 21- Nov 06, 21	323	563.4	497.3	638.3
	Nov 07, 21- Nov 20, 21	243	408.6	357.0	467.6
	Nov 21, 21- Dec 04, 21	229	397.8	342.8	461.5
	Dec 05, 21- Dec 18, 21	349	587.0	522.3	659.7
	Dec 19, 21- Jan 01, 22	1,386	2,402.3	2,264.2	2,548.9
	Jan 02, 22- Jan 15, 22	3,307	5,684.5	5,471.9	5,905.3
	Jan 16, 22- Jan 29, 22	1,659	2,928.5	2,772.1	3,093.6
	Jan 30, 22- Feb 12, 22	540	965.7	875.5	1,065.3

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
Multiracial	Feb 13, 22-Feb 26, 22	211	399.9	341.4	468.5
	Feb 27, 22-Mar 12, 22	73	133.2	103.5	171.2
	Mar 13, 22-Mar 26, 22	37	63.3	44.6	89.9
	Mar 27, 22-Apr 09, 22	68	120.5	91.2	159.2
	Mar 01, 20-Mar 14, 20	12	8.9	4.7	16.6
	Mar 15, 20-Mar 28, 20	66	32.7	24.9	43.0
	Mar 29, 20-Apr 11, 20	77	35.1	27.1	45.6
	Apr 12, 20-Apr 25, 20	53	27.4	20.1	37.4
	Apr 26, 20-May 09, 20	58	22.9	17.2	30.5
	May 10, 20-May 23, 20	48	20.4	14.9	28.0
	May 24, 20-Jun 06, 20	71	32.8	25.3	42.6
	Jun 07, 20-Jun 20, 20	109	36.6	29.3	45.7
	Jun 21, 20-Jul 04, 20	209	67.4	57.4	79.1
	Jul 05, 20-Jul 18, 20	228	87.5	75.2	101.8
	Jul 19, 20-Aug 01, 20	243	94.3	81.2	109.6
	Aug 02, 20-Aug 15, 20	160	55.5	46.0	66.9

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Aug 16, 20-Aug 29, 20	109	37.5	30.2	46.6
	Aug 30, 20-Sept 12, 20	105	37.0	29.2	46.8
	Sept 13, 20-Sept 26, 20	93	35.9	28.3	45.6
	Sept 27, 20-Oct 10, 20	136	51.4	41.9	63.2
	Oct 11, 20-Oct 24, 20	181	65.2	54.8	77.6
	Oct 25, 20-Nov 07, 20	416	146.3	130.5	164.0
	Nov 08, 20-Nov 21, 20	534	187.4	169.6	207.1
	Nov 22, 20-Dec 05, 20	551	199.7	181.4	219.9
	Dec 06, 20-Dec 19, 20	547	195.5	177.4	215.4
	Dec 20, 20-Jan 02, 21	430	155.0	138.9	172.9
	Jan 03, 21-Jan 16, 21	545	191.9	173.7	211.9
	Jan 17, 21-Jan 30, 21	331	115.2	101.1	131.3
	Jan 31, 21-Feb 13, 21	244	81.5	70.0	94.9
	Feb 14, 21-Feb 27, 21	162	56.2	46.6	67.7
	Feb 28, 21-Mar 13, 21	158	56.1	46.6	67.5
	Mar 14, 21-Mar 27, 21	270	94.4	81.9	108.8

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Mar 28, 21-Apr 10, 21	368	112.4	99.9	126.4
	Apr 11, 21-Apr 24, 21	486	153.3	138.3	170.0
	Apr 25, 21-May 08, 21	399	112.5	100.3	126.3
	May 09, 21-May 22, 21	266	73.6	63.9	84.8
	May 23, 21-June 05, 21	173	49.3	41.4	58.9
	June 06, 21-June 19, 21	102	30.6	24.4	38.4
	June 20, 21-July 03, 21	102	32.5	25.3	41.8
	July 04, 21-July 17, 21	170	51.2	42.9	61.2
	July 18, 21-July 31, 21	362	118.1	104.8	133.2
	Aug 01, 21-Aug 14, 21	619	193.0	175.6	212.0
	Aug 15, 21-Aug 28, 21	611	189.4	172.0	208.6
	Aug 29, 21-Sept 11, 21	643	206.1	187.5	226.6
	Sept 12, 21-Sept 25, 21	642	196.4	178.7	215.9
	Sept 26, 21-Oct 09, 21	575	175.4	158.5	194.0
	Oct 10, 21-Oct 23, 21	572	166.4	150.8	183.6
	Oct 24, 21-Nov 06, 21	447	137.8	122.7	154.8

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
AIAN	Nov 07, 21-Nov 20, 21	446	137.6	123.0	154.0
	Nov 21, 21-Dec 04, 21	384	122.3	108.4	138.0
	Dec 05, 21-Dec 18, 21	562	157.8	142.8	174.3
	Dec 19, 21-Jan 01, 22	635	199.4	182.0	218.5
	Jan 02, 22-Jan 15, 22	1,357	388.1	363.6	414.3
	Jan 16, 22-Jan 29, 22	862	253.2	233.2	275.1
	Jan 30, 22-Feb 12, 22	452	159.6	141.9	179.5
	Feb 13, 22-Feb 26, 22	125	47.2	37.9	58.8
	Feb 27, 22-Mar 12, 22	64	29.0	21.2	39.6
	Mar 13, 22-Mar 26, 22	60	25.1	18.2	34.6
	Mar 27, 22-Apr 09, 22	134	45.9	37.1	56.8
	Mar 01, 20-Mar 14, 20	7	9.0	4.1	20.0
	Mar 15, 20-Mar 28, 20	34	38.0	26.9	53.6
	Mar 29, 20-Apr 11, 20	55	62.0	47.4	81.2
	Apr 12, 20-Apr 25, 20	44	46.0	34.2	61.9
	Apr 26, 20-May 09, 20	78	80.4	64.4	100.5

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	May 10, 20-May 23, 20	62	65.6	50.9	84.6
	May 24, 20-Jun 06, 20	99	106.4	87.0	130.2
	Jun 07, 20-Jun 20, 20	113	117.1	97.3	141.0
	Jun 21, 20-Jul 04, 20	113	120.8	100.0	145.8
	Jul 05, 20-Jul 18, 20	107	114.9	94.5	139.7
	Jul 19, 20-Aug 01, 20	162	170.5	145.6	199.5
	Aug 02, 20-Aug 15, 20	126	138.8	115.7	166.5
	Aug 16, 20-Aug 29, 20	80	83.4	66.7	104.2
	Aug 30, 20-Sept 12, 20	60	65.0	50.1	84.5
	Sept 13, 20-Sept 26, 20	66	67.4	52.9	85.9
	Sept 27, 20-Oct 10, 20	73	75.7	60.1	95.4
	Oct 11, 20-Oct 24, 20	63	67.1	52.0	86.6
	Oct 25, 20-Nov 07, 20	135	142.3	119.8	168.9
	Nov 08, 20-Nov 21, 20	311	333.5	297.6	373.7
	Nov 22, 20-Dec 05, 20	461	484.0	441.1	531.1
	Dec 06, 20-Dec 19, 20	468	496.0	452.3	543.9

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Dec 20, 20-Jan 02, 21	368	390.7	352.1	433.6
	Jan 03, 21-Jan 16, 21	398	410.1	371.4	452.8
	Jan 17, 21-Jan 30, 21	292	303.9	270.4	341.6
	Jan 31, 21-Feb 13, 21	250	258.9	228.3	293.5
	Feb 14, 21-Feb 27, 21	167	170.7	146.5	199.0
	Feb 28, 21-Mar 13, 21	169	170.1	146.2	197.9
	Mar 14, 21-Mar 27, 21	170	171.2	147.2	199.1
	Mar 28, 21-Apr 10, 21	202	208.2	180.9	239.6
	Apr 11, 21-Apr 24, 21	258	262.1	231.6	296.5
	Apr 25, 21-May 08, 21	212	217.7	189.9	249.5
	May 09, 21-May 22, 21	193	195.9	169.9	225.9
	May 23, 21-June 05, 21	107	107.0	88.5	129.4
	June 06, 21-June 19, 21	85	88.1	71.0	109.4
	June 20, 21-July 03, 21	55	58.8	44.7	77.3
	July 04, 21-July 17, 21	76	77.6	61.7	97.5
	July 18, 21-July 31, 21	242	249.7	219.8	283.7

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Aug 01, 21-Aug 14, 21	452	467.3	425.6	513.1
	Aug 15, 21-Aug 28, 21	610	633.8	584.8	686.9
	Aug 29, 21-Sept 11, 21	631	657.2	607.1	711.5
	Sept 12, 21-Sept 25, 21	556	576.7	529.8	627.8
	Sept 26, 21-Oct 09, 21	495	510.5	466.8	558.4
	Oct 10, 21-Oct 23, 21	433	448.2	407.3	493.1
	Oct 24, 21-Nov 06, 21	344	353.1	317.3	392.9
	Nov 07, 21-Nov 20, 21	244	249.6	219.6	283.7
	Nov 21, 21-Dec 04, 21	223	230.5	201.8	263.3
	Dec 05, 21-Dec 18, 21	228	236.1	206.9	269.4
	Dec 19, 21-Jan 01, 22	704	726.3	673.9	782.9
	Jan 02, 22-Jan 15, 22	2,264	2,334.6	2,238.8	2,434.4
	Jan 16, 22-Jan 29, 22	1,684	1,725.3	1,643.9	1,810.7
	Jan 30, 22-Feb 12, 22	777	817.5	760.7	878.6
	Feb 13, 22-Feb 26, 22	248	266.5	234.3	303.1
	Feb 27, 22-Mar 12, 22	104	111.5	91.3	136.1

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Mar 13, 22-Mar 26, 22	80	86.0	68.6	107.7
	Mar 27, 22-Apr 09, 22	87	86.9	70.3	107.3

Source: Washington Disease Reporting System (WDRS)

Cumulative crude confirmed or probable case counts and percentages by language spoken

Analysis of language spoken provides another important method to understand health disparities and communities impacted by COVID-19. Use of one method alone may mask health disparities and community-specific impacts. Almost half of reported confirmed or probable cases are missing information on primary language. Despite missing data, there are some important observations.

The following table presents counts and percentages of confirmed or probable cases, by primary language spoken. The percentage of the Washington state population 5 years and over with limited English proficiency that speak each language are also included to provide context. The information on the percentage of the Washington state population with limited English proficiency come from the Office of Financial Management 2016 estimates. Findings should be interpreted with caution due to the high proportion of missing data (75%).

Table 4. Confirmed or probable COVID-19 case count and percentage of cases by primary language spoken

Language	Case Count	% of Cases	% of WA Population with Limited English Proficiency*
All Cases	1,478,415	100.0%	
Unknown Language	1,111,875	75.2%	
Known Language	366,540	24.8%	
English	318,062	86.8*%	
Spanish	41,045	11.2*%	6.4
Marshallese	353	0.1*%	0.1

Language	Case Count	% of Cases	% of WA Population with Limited English Proficiency*
Vietnamese	1,296	0.4*%	0.5
Russian	1,754	0.5*%	0.3
Chinese (all)	465	0.1*%	0.3
Ukrainian	310	0.1*%	0.2
Somali	363	0.1*%	0.1
Tagalog	181	0.0*%	0.1
Amharic	204	0.1*%	0.1
Other	2,507	0.7*%	

*For more information on the selected WA populations by primary language reported here, please see the WA OFM methodology, https://ofm.wa.gov/sites/default/files/public/legacy/pop/subject/ofm_pop_limited_english_proficiency_methodology.pdf

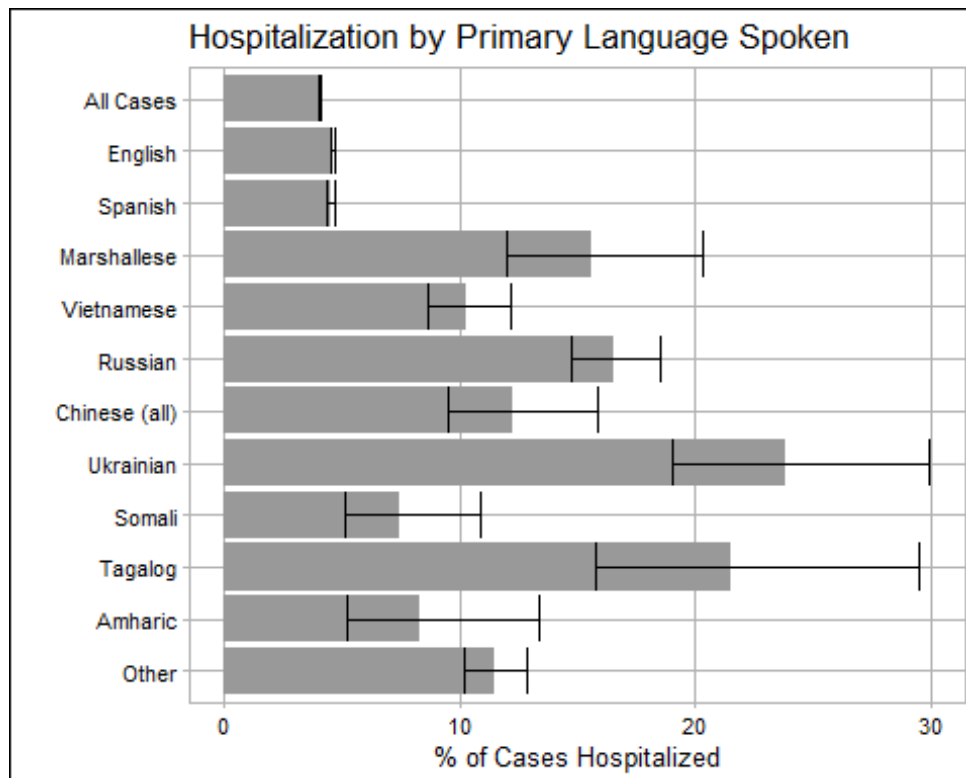
Cumulative hospitalization percentages among confirmed or probable COVID-19 cases by language spoken

The following table and graph present the percentages of confirmed or probable cases who were hospitalized, by primary language spoken. The high rates of hospitalizations among confirmed or probable cases whose primary language was other than English or Spanish suggests that increased exposures and/or barriers to care may contribute to more severe disease in these populations. Languages with less than 10 individuals hospitalized were removed from this analysis to protect patient confidentiality. Findings should be interpreted with caution due to the high proportion of missing data (75%).

Table 5: Percentages of confirmed or probable COVID-19 cases hospitalized by primary language spoken

Language	Case Count	Hospitalization Count	% language specific cases hospitalized
All Cases	1,478,415	59,788	4%
English	318,062	14,709	4.6%
Spanish	41,045	1,853	4.5%

Language	Case Count	Hospitalization Count	% language specific cases hospitalized
Marshallese	353	55	15.6%
Vietnamese	1,296	133	10.3%
Russian	1,754	290	16.5%
Chinese (all)	465	57	12.3%
Ukrainian	310	74	23.9%
Somali	363	27	7.4%
Tagalog	181	39	21.5%
Amharic	204	17	8.3%
Other	2,507	287	11.4%





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